

**HANSARD**

**NOVA SCOTIA HOUSE OF ASSEMBLY**

**COMMITTEE**

**ON**

**RESOURCES**

**Thursday, December 18, 2014**

**LEGISLATIVE COMMITTEES OFFICE**

**Nova Scotia Beekeepers Association  
Industry Overview**

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## **Resources Committee**

Mr. Gordon Wilson (Chairman)  
Mr. Keith Irving (Vice-Chairman)  
Mr. Lloyd Hines  
Mr. Bill Horne  
Ms. Margaret Miller  
Hon. Alfie MacLeod  
Mr. John Lohr  
Hon. Sterling Belliveau  
Ms. Lenore Zann

[Mr. Bill Horne was replaced by Mr. Stephen Gough]  
[Mr. Alfie MacLeod was replaced by Hon. Pat Dunn]

In Attendance:

Ms. Kim Langille  
Legislative Committee Clerk

## **WITNESSES**

### **Nova Scotia Beekeepers Association**

Mr. Joe Goetz  
President

Mr. Perry Brandt  
Vice-President



House of Assembly  
Nova Scotia

**HALIFAX, THURSDAY, DECEMBER 18, 2014**

**STANDING COMMITTEE ON RESOURCES**

**9:00 A.M.**

CHAIRMAN  
Mr. Gordon Wilson

MR. CHAIRMAN: I call the meeting to order. My name is Gordon Wilson and I'm the chairman of the Standing Committee on Resources. Today the committee will be receiving a presentation from the Nova Scotia Beekeepers Association. We welcome you here.

I'd ask the committee members to introduce themselves for the record by stating their name and their constituency, starting with Mr. Belliveau.

[The committee members introduced themselves.]

MR. CHAIRMAN: We have a regret from Lenore Zann and I'd also like to pass on regrets from John Lohr; we had some unfortunate news this morning of the passing of his father. Our thoughts are with John today - always a good member of this committee.

I'd like to remind everybody who is in attendance that cellphones and all that - please put them on vibrate. I remind the witnesses to give us a chance to try and work with our Hansard people there. Usually I'll try to introduce whoever is going to be speaking.

Today we'll be having a witness presentation. We will then be doing some committee business; agenda-setting is one of our big topics that we have for today. We'll probably wrap up our questioning with the Beekeepers Association around 10:30 a.m., so we can move into committee business.

I would like to welcome our officials from the Beekeepers Association and ask them to introduce themselves and begin their presentation.

MR. JOE GOETZ: First I'd like to thank you very much for allowing us this opportunity. My name is Joe Goetz, and I'm the President of the Nova Scotia Beekeepers Association. I brought my Vice-President Perry Brandt with me as well, so thank you.

There are four issues I would like to talk about and then leave the majority of the time available for questions, which are probably more important than what we are going to present to you. The four topics are: the association itself; wildlife damage; the pollination expansion program; and neonicotinoids, which seems to be quite a hot topic lately.

There is something like 330 registered beekeepers in Nova Scotia; 61 of these are new this year. Our challenge is that we have 93 members, which is less than one-third of the beekeepers in Nova Scotia. We've taken it on ourselves to try to increase that to 60-plus per cent so that we have a more accurate reflection of all the beekeepers in the province.

One of our main reasons for doing that is we fund the Canadian Honey Council through a fee-per-hive process so in essence, we are subsidizing beekeepers for their, I guess, moral obligation for the Canadian Honey Council.

Another topic I'd like to talk about is wildlife damage, and bears are the culprit here. The Nova Scotia Crop and Livestock Insurance Commission provides compensation but it's not necessarily the equivalent to the loss of the hives. Similar to a cow, a pregnant dairy cow is probably worth more money than one that has just weaned her calf. The same is true with the hive. One that in the Spring is ready to go for pollination is worth a considerable amount of money to the beekeeper through the pollination, through possible splits, through the honey production of that hive, versus one later on in the Fall which has already generated all those funds.

I feel the Nova Scotia Government has a vested interest in ensuring that we are compensated properly. You've invested money through the Pollination Expansion Program and through the Growing Forward 2 program, for beekeepers and bees. I know the commission has sent us the opportunity, but we just haven't had the time to respond to them because we're a volunteer organization. We will eventually get back to them over what we feel is compensation, based on a timeline over the course of a year.

I'd like to thank the Nova Scotia Government for their Pollination Expansion Program; it expires this year. There are something like 39 applicants who applied to it, with 4,300 hives planned. In the Province of Ontario, we have something like 21,000 bee hives. In accordance with the largest blueberry grower, they want 11,000 more. There's a bit of a cost for that, 11,000 are going to be in excess of \$3 million. Most of the beekeepers in the province are fairly small scale. This means that hives are brought in from Ontario and elsewhere, through - help me out here, Perry - a permit and 10 per cent inspection program that they go through.

MR. PERRY BRANDT: Just to clarify one thing, that's the Province of Nova Scotia. I think Joe might have mentioned Ontario but it's here that we're talking about with the 20,000 hives.

MR. GOETZ: Actually most of them are brought in from Ontario to do the pollination here.

This kind of brings us to the beekeepers paradigm because as soon as you mention honeybees, people automatically start thinking of honey. The reality of it is that the honey production in Nova Scotia is something like \$1.5 million. The potential for pollination revenue is in excess of \$4.6 million so it's a considerable amount of money that a fair bit of that is actually being drained off to Ontario.

Neonicotinoids - we're concerned anytime, anywhere pesticides are used that will affect our bees. We are a small volunteer organization; we don't have any resources to go out and test to see if there are neonicotinoids in our hives or anything like that. So we rely on open source material. As far as I'm aware, there are no proven issues of neonicotinoids affecting hives in Nova Scotia right now. That doesn't mean there is not a latent factor that could be building.

We also understand that growers need insecticides and can't afford to feed non-beneficial insects. So a balanced approach based on scientific fact and not emotion is required - something like avoiding a blanket prophylactic use on seeds when it may or may not be required. I think our way ahead is to have some sort of joint effort from the Department of Agriculture, the Department of Environment, the Department of Health and Wellness and the agricultural community in order to find out where Nova Scotia should go with the use of neonicotinoids.

With that, I will answer your questions.

MR. CHAIRMAN: That was short and sweet, thank you. I would entertain questions. Mr. Hines.

MR. LLOYD HINES: I am interested in the wildlife damage, Joe. What is the industry practice across North America in dealing with it? This must be common.

MR. GOETZ: A number of years ago I lost eight hives to bears; I was compensated for them. It was a fair time back so I don't recall the exact specifics of how much it was. More recently we had a beekeeper who lost, going into pollination - I don't have the exact specifics but he could have lost the money for that pollination, which could be \$150 to \$160 per hive. He lost the potential to split those hives, which could generate another \$160 to \$170. Plus he lost the honey crop that those hives could have produced, which could have been 50 or 60 pounds of honey, so that was lost. Had he lost those in August, he would have just lost the bees, which were probably valued around \$300.

MR. HINES: What is the accepted practice across the industry to deflect the bear?

MR. GOETZ: Electric fence is the most common, but they're not fool-proof - they can fail. They can be blown over, they can be knocked over. A deer could run through it, meaning the fence is down and leaving the bees open.

MR. CHAIRMAN: Mr. Dunn.

HON. PAT DUNN: Perhaps it's too early in the winter to answer this question, but I'll ask it anyway. With regard to losses during the winter, what is your expectation this particular winter with the forecasts - the type of weather we're going to have?

MR. GOETZ: I like the weather so far. (Laughter) Last year was pretty hard. We took a substantial loss. We've taken better precautions. Our bees are inside this year so I suspect that our loss will be much reduced over last year. I can't speak on what everybody else does, but I imagine all the commercial beekeepers - they're well aware that if they lose their herd, they lose their productivities.

MR. BRANDT: Historically, over decades, typical winter losses average between 10 and 15 per cent. That is considered an acceptable loss in our industry. However, the last decade, I would say, it hasn't been the case. I don't know what the exact average would be, but 30 to 35 per cent is not uncommon. Some years it can even be higher.

I think last year provincially we averaged somewhere between 15 and 20 per cent, and everybody was really happy with that. When you start losing one-third every year of your livestock - if it was chickens or cows or any other animal, everybody would be up in arms about it, but because it's a bee, it doesn't seem to generate the same panic, I guess is the word for it.

From what I've gathered, the bees look good at this time of year. That doesn't tell you what's going to be there in March, there are just too many factors. Bees are under a great deal of stress, their immune systems are compromised. Going back over years, with small things, the bees were able to adapt and deal with, but because their immune systems now are not at peak, any one of those things now has the ability to take out a colony. That's just a reality of what we're facing, so just to bring you up to snuff on over-wintering losses. We'll know best - I think the month of March is when most hives are lost.

MR. DUNN: Going back to last winter, I think the winter set in maybe around November 20<sup>th</sup> and it stayed with us, so last year would have been a difficult year because of the longevity?

MR. GOETZ: Last year was the worst year I've ever had and I've only been in Nova Scotia since 2007 and it was pretty interesting.

We are very fortunate with bees in that you can take a really good, strong, healthy colony, and in the right conditions you can get four or five colonies out of that early in the year. You can't do that with cows and chickens - well maybe with chickens, I guess, but certainly with other animal husbandry it's a lot more difficult. But then again it's like raising dairy cattle, you can have milk or you can feed the calves. It's the same with bees, you can create more bees or you can have honey, it's the same kind of thing.

MR. DUNN: You mentioned a pollination enhancement program, is there any indication that that may continue in the future?

MR. BRANDT: We've applied, but we haven't yet heard whether or not there will be a continuation of that program. It has proven effective, in my opinion. We've seen an increase in colony numbers, perhaps not what the blueberry industry would like to see, but we're a small group so we're doing what we can.

MR. CHAIRMAN: Mr. Belliveau.

HON. STERLING BELLIVEAU: I was interested in exactly that same previous question, the pollination program. First of all, my limited knowledge of this industry is simply that, it's limited, but I'm fascinated at that. I recall as I came across the Tantramar Marshes that there's a sign there talking about the bee imports.

In your presentation you talked about bringing these bee hives in from other jurisdictions and to me, you may have felt comfortable explaining that but I felt from an ordinary point of view that that needs to be explained more. Why do we have to depend on other jurisdictions? Why can't we enhance our own bee population?

MR. GOETZ: We can but it takes time and it takes money. In order to expand to where the blueberry industry would like us to be, that's a \$3 million investment - sorry, it was a little more than that, wasn't it? Yes, 11,000 hives - it's going to be in excess of \$3 million in order to put those together. I don't think the small beekeepers and the medium-size beekeepers in Nova Scotia have that kind of money. It would probably take five or six years or more to do that on our own.

With that comes significant risk. To go from handling 50 or 60 hives as a hobby to taking the leap of faith to invest in 300 or 400 or 500 hives and still be able to feed yourself over the course of two or three years, that's a big faith. When you start getting up into the numbers of 200 or 300 hives it's a full-time job. With that comes the cash flow problem of okay, you're perhaps cash rich in the Spring but you've got to make sure that carries you over to next Spring as well. I suspect that is part of the problem as well, to take that leap of faith and be able to jump from a job that pays you cash to one where you have to be able to generate that cash on your own.

MR. BRANDT: If I could add to that, 10,000 hives is a lot of hives, and the border issue is a whole topic unto itself. If you were looking at it from a business standpoint, what

person would want to invest that kind of money in beekeeping, particularly when we're seeing the problems in our industry that we have right now? I can think of a lot safer ways to make money than to invest money into expanding 10,000 hives. It's a very risky proposition - it's livestock, it's farming. You talk to any farmer and they'll tell you that you're not guaranteed any outcome. So to think that there would be a rush of people looking to get into this is just not the case.

As far as the border issue goes, that's a real tricky topic. If we're short in this province of the hives that the blueberry industry requires and we can't provide them, the door was opened - I know the sign you're talking about, I believe it's still there - but the door was opened a crack. Somebody jammed a foot in there in 2011 and roughly 4,500 hives come in every year from Ontario to do pollination and then leave. The inspection process on those is typically 10 per cent of the hives are inspected prior to leaving Ontario. That means that 90 per cent of them coming in are not inspected.

It's wonderful that they come in here and they pollinate and provide the services for the blueberry industry, but when they leave and go back to Ontario, what they've left behind is the bigger issue, in my opinion. There are certain diseases that we don't have here that they do have elsewhere. We've just recently started having tracheal mites, which affect beehives in the province. I believe that was because it was discovered that we do have some tracheal mites here in Nova Scotia - it's very limited - and that was the reason to perhaps open up that border a bit.

What we do not have here are small hive beetles and they do have those in certain pockets in Ontario. Small hive beetles will change the industry, as far as honey is concerned, if it does eventually make its way here. Small hive beetle infestations in hives can spoil your honey crop in as little as 48 hours. So whereas typically we would go out, harvest our honey, bring it back, store it, deal with the bees, get everything ready, and then come back and extract our honey, you now have to have that honey removed within 48 hours or they will spoil your crop. Your only other option is to build expensive refrigeration units to store your honey and then reheat it prior to extracting.

We don't have the small hive beetle here; again, it is in Ontario. Are we at risk? Any time you're moving bees back and forth anywhere, there's potential for problems and it just increases. As well, the whole border issue is now becoming somewhat blurred. We have hives that we take from Nova Scotia and they go to P.E.I. to help the blueberry industry there and are brought back. In this past year I believe hives also went to New Brunswick from Nova Scotia and came back, at the same time that hives from Ontario are coming into Nova Scotia. So it's really starting to get blurry as to what exactly is going on there in regard to the open border issue. Uncertainty is not something we need in our industry, it's tough enough without that.

We would like some clarity on that. If it requires expanding our numbers here and keeping that border closed, that to me seems like a pretty good solution. Again, that's my opinion. I'm sure that if you asked 10 beekeepers the same question you'll get 15 different



answers. But I can tell you that at our AGMs, the issue of the open border is brought up and we always vote unanimously to have that border kept closed.

MR. GOETZ: That's not to say that bees aren't brought in, I mean we bring in queens from Hawaii and from California. Each one of those little packages is inspected for things like hive beetle. Bees are also brought in from places like Australia, where there are no tracheal mites and they have a pretty closed border there - and New Zealand. So bees do come into Nova Scotia, but there are some low-risk places that they do come in from.

If I could also expand on the 11,000 hives that we're short in the province - where do we put those hives? Beekeepers are kind of secretive and we don't want other beekeepers to know where our hives are. We know the Annapolis Valley is pretty full of bees and there is probably not too much room there for them, but where else in the province would Perry have his bees? I don't know. He doesn't know where my bees are and I don't know where the places are in Musquodoboit Valley where the beekeepers keep their bees either.

So that's part of the problem. Will we come out and let people know where our bees are? That's probably a good thing to do in order to coordinate so that we're not sticking our bees on top of each other and not even realizing it. That's something that we can probably work on. I think I'll just leave it at that. Thank you.

MR. CHAIRMAN: Mr. Irving.

MR. KEITH IRVING: I just wanted to try to get a few questions across to get a better understanding of the Nova Scotia Beekeepers Association. Can you perhaps give me a sense of that association - what membership costs are, what you do, why you feel that you're capturing 93 out of 300? What are the barriers there that you think might be only capturing a third of the potential membership, and expand a bit on what the Canadian Honey Council does? You say you're funding that - what do they do and how much of your fees get transferred nationally?

MR. GOETZ: I'll start with the Canadian Honey Council. They do very much what we're doing here, and they represent that to the Canadian Government. We fund them - I believe the cost is 14 cents per hive, so for every hive that is registered in Nova Scotia, we pay 14 cents to the Canadian Honey Council so that they can operate. That's across Canada - all the provincial beekeeping associations pay that. Our fee, I believe, is \$25 for 2015.

MR. BRANDT: That's our proposed fee, yes.

MR. GOETZ: Then there is a per diem based on the number of hives that you have. I just don't recall what that is off the top of my head. The very most that you would pay would be well less than \$500.

MR. BRANDT: The largest amount at one point in time was, I believe, around \$1,500 for the largest beekeeper. At our last AGM, we voted to drop that back down to between \$300 and \$500.

MR. GOETZ: So if you have two hives in your backyard, it's going to cost you \$25 and that's probably going to be it - that kind of thing. What are our challenges with that? First we have to give value-added - we're all volunteers, some of us have day jobs and then we have bee jobs - so to find and ensure that we have that value-added.

We've got a couple of proposals I'm putting to our committee to try to attract the other couple hundred beekeepers that we're missing. Will that be successful? I don't know. I certainly hope it is because if you're listening to us, you're only listening to 93 of the beekeepers in the province.

We're also looking at things like insurance - the bear damage, all those kinds of things. At some point we may even ask the province if they would consider making it mandatory to - if you're going to be a beekeeper, you have to have a beekeeper registration number and you have to be a member of the Nova Scotia Beekeepers Association, similar to what the Nova Scotia Federation of Agriculture has.

MR. IRVING: Of the 93, and maybe you'd like to expand on this in terms of the beekeepers that are interested in the revenue for pollination and the beekeepers that are interested in the revenue from honey - I don't know how much crossover there is, whether you're trying to gain revenue from both aspects or not. Maybe you can explain a bit about that.

Just so I have an understanding of the sizes of the various members, when I take \$6 million of revenue, and some of that's going out of province, as you mentioned, and 300 beekeepers, we're probably talking less than \$20,000 per beekeeper. So am I to assume that the majority of the beekeepers are part time? Could you kind of expand on that in terms of the makeup of the beekeeping industry - hobbyists, pollinators, honey makers?

MR. BRANDT: When I first moved to Nova Scotia and resumed beekeeping, I remember when I picked up my first nucs - which are starter colonies - the joke was that you're either in it for the honey or you're in it for the money. Pollination is where a great deal of the income is for beekeepers, but when you look at our membership, the vast majority are not actually in it for pollinating. The actual numbers of beekeepers who do pollinating for a living are very small.

Also, if you look at the numbers of colonies we have in this province, somewhere around 20,000, one beekeeper has probably over half of those and that's the blueberry industry. They are the largest beekeeper in the province. There's a bit of a crossroads when it comes to pollination versus the beekeeper that's in it for honey. For instance, the large beekeeper that has pollination units, and that's really all they're interested in, they don't even harvest honey, that's not part of their plan. Their plan is the pollination; they're trying

to meet another objective and sometimes those two things clash. An example would be feeding; when hives are constantly split to make up numbers, they're in a weakened state. If you have a good, strong colony, it could bring you in, for instance, 100 pounds of honey.

If you split that colony in two and you think each half will make 50 pounds, that's not the case, that's now how it works, you're going to have a smaller harvest. So by constantly splitting to make up numbers, these colonies are in a weaker state than a colony that is left alone. Sometimes they require supplemental feeding, which is sugar syrup. In our better practices we have certain dates where that is not recommended but it does go on.

You have beekeepers such as myself that have honey boxes on top of hives that are trying to collect nectar for the bees to turn into honey but you have a pollinating beekeeper that is a kilometre or two away who is open-barrel feeding or open feeding - in other words, there's unrestricted access to that - well, I don't want my bees bringing sugar water back to my hives, that's not what I'm selling. I'm selling honey, not sugar water. So there are instances where the two don't work well together.

That's something that we struggle with and we try to work around that and try to accommodate - if I've got a yard and I recognize that I have some commercial beekeepers that are very involved with the pollinating industry, I'll shut down my yard and I'll move it.

MR. GOETZ: We consider a commercial beekeeper like 50 hives or more. I would think we've probably got at least 50 in the province.

MR. BRANDT: That's probably about right, yes.

MR. GOETZ: So probably 50 beekeepers have more than 50.

MR. CHAIRMAN: Mr. Dunn.

MR. DUNN: Perhaps a couple of questions. I read that an Australian queen bee was worth somewhere between \$300 and \$400 - maybe \$350 - is that correct?

MR. GOETZ: I guess it depends - it's like horses, right? If you buy a thoroughbred, you pay a lot more for it. Typically when we bring them in from Australia in the early Spring they're \$20 each and they come with a package of bees. I'm quite sure that you could spend a considerable amount of money more for some sort of Gucci model. Would they be any better or not? Well, it's probably a 50/50 chance.

MR. BRANDT: Our association does purchase queens and we usually get them from Hawaii. They're available to the members and it depends on the number you buy. Joe mentioned \$20 and that's if you get them with a package of bees. If you're buying just the queen, which is what I do, I will take my successful colonies in the Spring and split them and then introduce a new queen to the queenless half. They run about \$30 to \$32 a piece.

That's typical of what the beekeepers here would pay - \$20 if you're getting them in a package, but around the \$30 mark.

MR. DUNN: What is the value of our queen bees in Nova Scotia compared to other jurisdictions?

MR. BRANDT: That's a good question. You can probably pick up local queens for around \$25. The problem with that is that locally-available queens are not available until usually mid-June. This is why we rely so heavily on offshore queens. In order to meet the blueberry industry, they require pollinating units towards the end of May. We can split our hives before that, but we can't raise local queens until mid-June. So in order to do that split, in order to do the increase, we have to bring our queens from someplace else - Australia and Hawaii. I think last year for the first time we actually got some in from California. That's the only way we can split a hive early enough to create the pollinating units in time for the pollination.

MR. BELLIVEAU: This is probably a poor place to bring up about the southern part of Nova Scotia being the banana-belt of the Maritimes, but I grew up there. In your presentation, I think both of you made reference to the severity of our previous winter and the effect that has on the bee industry.

I don't know if you are aware of it, but there was a climate change evaluation of southwestern Nova Scotia, basically pointing out that, yes, we have this kind of unique climate. It's on par with Annapolis Valley, if not better.

So my question is - in a long-winded way - for the bee industry to expand, does it have to have a commercial sector like the blueberries? Can hobbyists get interested in this industry in Nova Scotia, particularly in southwestern Nova Scotia where there is not a traditional blueberry commercial harvester? Can they exist with just a natural setting?

MR. GOETZ: I would say absolutely. We have run a number of bee schools, we call them, and they get together for four-hour presentations and lunch and go through a beehive. We've had over the past two years probably 150 people go through that. There are a lot of people out there who are interested. A lot of them have bought nucs and started their own bees. Absolutely, you can put them on top of the roof of this building and they'll probably do quite well, providing you can protect them from the wind and the severe climate change that sometimes comes in the middle of the night here. I'm not sure how many bees are down in the Yarmouth area.

MR. BRANDT: There is a new beekeeping group that started up in Yarmouth, but all along the South Shore - actually, before I moved to Wolfville three years ago I kept bees in Lunenburg and my honey crops were much better there than they were here. The Valley has a lot of competition for the forage that's available.

The South Shore is actually a good spot. As far as commercial, I don't know. There is a young man just outside of Bridgewater who is making a really decent and honest attempt at going commercial there; I wouldn't be at all surprised if he's quite successful. He's further away from the blueberries so he's going to end up having to transport his bees farther, but when they come out of the pollination for the rest of the year, I think he's in a pretty good spot. There is no competition.

MR. BELLIVEAU: I think I need to clarify what my question is. There is generally no commercial sector like blueberries in the southern portion of Nova Scotia; if you exclude the Annapolis Valley, it's limited as to apples or particular orchards or whatever. My question is that given the climate in southwest Nova Scotia, this would be a great opportunity for bees to live. Do they have to have a blueberry field or an orchard in order for this particular hobbyist to create an opportunity for revenue?

MR. GOETZ: They will probably do quite well there. Again, it depends on how many bees are down there. I'm not sure how many are there, but typically the honeybees will travel five kilometres or more in order to find food.

It's like firewood, if you're walking five kilometres to bring back a load of firewood in your arms, it's going to be a cold winter. So the closer the food is to the hive, the more production you will get out of that hive.

So they've been around for quite some time, and despite what we're doing to them, they're still hanging on.

MR. BRANDT: I would say that just about anywhere could support half a dozen hives. My yards are all quite small and I don't really worry too much about available forage. My bigger yards will have, say, 12 colonies in them, but along the South Shore anybody almost anywhere could keep a half-dozen hives and they would probably do quite well.

MR. CHAIRMAN: Just a word of caution, we try not to use the word "firewood" around Sterling too much. (Laughter) Sorry, Sterling. Ms. Miller.

MS. MARGARET MILLER: I thought you had been watching too much Legislative TV or something to bring that up.

I find this conversation really fascinating. I have a couple of questions for you. You talked about the bee colonies being quite fragile, would that be because of pesticide use do you think? What's making the colonies fragile in Nova Scotia?

MR. GOETZ: There are so many factors that impact a beehive. One thing we use is critical mass; until you have the critical mass of bees built, they're quite susceptible to a lot of things. Now the critical mass depends on the temperature outside, the distance they're travelling to get food, the weather - it fluctuates. So the effective insecticides are obviously

designed to kill insects and they do it quite well, but they also break down so what residues are left inside the hive - is that affecting the queen's ability to lay eggs? We don't know. There are just so many different factors out there that affect the health of that colony, like was the queen mated well? How do we know? It's very difficult to pin unless you have some sort of lab system that can say yes, there's this chemical in the hive or it's chemical-free, to say exactly why that colony is weak or not.

MS. MILLER: I know the Department of Agriculture does very extensive pesticide training and safety courses. I expect that in general across the province pesticide use is not as prevalent as it used to be. I think they do a better job with pesticides. I think it was more free range 20 or 30 years ago - I know when we were farming certainly it was.

My second question is if I wanted to get into beekeeping and say I lived here or I lived in Truro, can I go take a course? Can I go and learn from point A exactly what I need to do, and how many people are taking advantage of this? Are there people taking advantage of this? It sounds like a great thing to get into.

MR. GOETZ: I'd like to answer the first part of that question first, pesticide use. The apple growers and the orchard and the blueberry growers are pretty smart people. They realize that if they spray our bees, we'll be hunting them. It's not good for their industry to do that. We're in a symbiotic relationship - they look after us and we look after them.

There are beekeeping courses available. We do our own little, small, mini-bee schools. Dalhousie University offers a professional beekeeping course. The Nova Scotia Community College will be running a beekeeping course that I'll be instructing on in the Wolfville area, plus you can read books. The Internet - YouTube is so full of beekeeping videos that you'll be there for days. As Perry said earlier, you'll see 10 beekeepers with 15 opinions and it's sometimes hard to say, okay, what are we going to do here, because there so many thoughts on that subject.

In order to become a beekeeper you have to register and the guy is behind me, I think. There he is. You have to register with the provincial apiarist and that's free. They give you a beekeeping number and off you go.

MR. BRANDT: I would also like to add that if anybody here at any point in time gets the opportunity to go through a hive, take it. I have extra suits and my door is always open.

MR. CHAIRMAN: I might take you up on that - I appreciate it. Mr. Dunn.

MR. DUNN: There are number of theories - and you alluded to a few of them already - on what is causing the decrease in the bee population in Nova Scotia. I think there is research going on in the province, like at Dalhousie. If there was one aspect causing the most problem as far as the decreasing population, what would that be? Is there enough investment as far as research? Is there enough research going on to help the organization?

MR. GOETZ: I would say the number one reason is probably man. They've been around for 10 million years and now we're the ones that have put this pressure on them. The theory about cellphones - well, a cellphone is a radio; radios have been around since shortly after World War I, so my thoughts on cellphones - probably not. There are a variety of things out there from the Varroa mite to chemical residue to - what else is out there, Perry, help me out?

MR. BRANDT: I'm just going to offer my own opinion, and Joe is right - we are having the biggest impact on bees, but I think the industry itself has changed. We're asking a lot more of our bees than we ever have before. We didn't used to have to move bees around to address these pollinating issues where there is a huge monoculture. There were probably dozens of hives on every other farm all up and down through farming communities, but that's not the way farming is done anymore. You have these huge swaths of land where there is absolutely nothing except blueberries. So you truck in all these bees and you pollinate. The bees are restricted in their diet; they're pulled back out - they may be moved to another crop.

I don't think there is one answer as to why bees are struggling. I mean, if there was, we should be able to find it. Our Canadian Honey Council does research. That's one of the reasons why we as an association fund the Canadian Honey Council. They're our representative. That's where the studies and research comes from and that's why it's important for us to fund our portion of that, but as far as any one particular problem with bees, I don't know.

Varroa came in 1986. That has had a huge impact on the industry, but I think if you look at a lot of the information that has been gathered since that time, beekeepers are coming to grips with Varroa and we're learning how to deal with it through integrated pest management. I don't think it's the huge thing that it once was, but the bee health is still not flourishing. I don't think it has ever fully recovered. In my mind anyway, there is no single silver bullet or thing that you could identify as being the problem.

MR. GOETZ: One of the things I tell people to do is a pollinator challenge. On a nice sunny day, take a tablespoon of honey and smear it on your picnic table or your deck and see how many insects come to the party. You should see five or 10 or maybe even 20 different varieties of bees and bumblebees and wasps and flies and everything else come to that. My recommendation is that if nobody comes to that party, you should probably move because there is something wrong.

But then saying that, I drove around Manitoba last summer - where I'm from - and there are beekeepers putting hives inside of canola fields, which a lot of them have the neonicotinoid attached to the seed. Well a beekeeper is not going to do that if that's going to kill their bees.

Is research required? Right now it's kind of on both sides of the fence of the issue. Probably the best thing to do is just leave the bees alone. Every time we move them we lose 10 per cent of the hive, as an average loss. I'll leave it at that, thanks.

MR. CHAIRMAN: Mr. Hines.

MR. HINES: Maybe this already exists, gentlemen, but I'm just wondering, is there an opportunity in Nova Scotia to consolidate the supplies that are required by the beekeepers into a business that would be a purveyor of those kinds of things, whatever your consumables are, or does that already exist?

MR. GOETZ: There are a couple of the beekeepers that do, like Foote Family Farm carries supplies. There's one just across the border in New Brunswick, Country Fields, that does that as well. Amazingly enough, sometimes you can get them cheaper out of Winnipeg if you buy in large enough quantities to have them there.

In order to set up a business there is opportunity there but then there's the risk of how much stock to carry, you have to have a place to put that stock.

I thought of it, I've got a few extra smokers in my honey house, if you're looking for one. So yes, the opportunity is there. Will somebody else make it a bigger industry? I'm not sure.

MR. BRANDT: Yes, the western provinces have the honey co-operative, so you'll see Alberta, Saskatchewan, Manitoba, you have the western bee producers or honey producers, I forget the exact name of it. Their prices are kept low, to the point where if you are ordering things in any quantity, I've actually found it cheaper to have it shipped from Manitoba than I can buy it locally.

Are there areas - a little off topic - are there areas for expansion here in this province? I find it absolutely amazing in the Maritimes that the only source for woodenware, which is made out of pine, which is our boxes and our frames and whatnot, there are two manufacturers in the country, one is in Manitoba and one is in Quebec.

The last time I looked outside we had lots of pine here in this province. I don't know why that is the case, I don't know why we can't be producing those things right here, which would undoubtedly be cheaper for us to buy here if it is manufactured here as well.

MR. CHAIRMAN: Mr. Irving.

MR. IRVING: I want to come back to the issue of research because I sort of heard two things and I want to see if you can reconcile that or point us in the right direction here. There were comments earlier that it would be helpful if we had a lab system to more quickly identify problems I guess was the implication. There were discussions about the



need to understand locations, from the secret world of beekeepers, and the talks of the challenges that we're facing with bees.

My question is, is there Nova Scotia-specific research that would be helpful? Given our context with the dominance of the blueberry industry in this province, does that create a different context for our bees here that should lead us to do more Nova Scotia-specific research? As part of that question, are our local universities doing enough, in terms of research, to benefit the industry? Is that an area where we should be encouraging more research?

MR. GOETZ: We partner with Dalhousie quite often and this year's program was to look at the fodder availability inside Nova Scotia to see what the land would provide. Unfortunately our timings didn't quite jibe up so that has been postponed for a year. That will help with the problem of where you put 11,000 new beehives. That's going to happen next fiscal year.

Last year's project I believe was what contaminants are in our beehives. There's also that - do you recall exactly what they were?

MR. BRANDT: No, I don't. A lot of unofficial stuff goes on as well. For instance, I've had two Acadia students doing a study and they were using my hives as well, in regard to Varroa mites. A lot of that is sort of smaller, behind-the-scenes type of thing, it's not anything official.

As far as a lab in the province, I think it would be great. Right now if disease is suspected, for instance, American foulbrood samples are taken and they are shipped off to Beltsville. It's in the United States someplace, in Maryland. That's where we have to send them, at some expense, and then wait for the results.

Would it be advantageous to have something like that here in the province? Absolutely.

MR. IRVING: Do you have any sense of the costs associated with the benefits of something like that? Are these labs specific for bees in Beltsville or are they a lab that does all kinds of testing and we really just need to bring the bee testing to a lab near you?

MR. BRANDT: I think you've probably come close to it with your last comment there. Our new provincial inspector, Jason, worked with Dalhousie before he was hired as our full-time bee guy. I believe the lab that Dal has is very impressive but it's just a matter of getting the time in the lab to do a lot of this stuff.

I don't know anything further than that; Jason Sproule would probably be better equipped to address that sort of question.

MR. GOETZ: I was approached by Dalhousie University as well to do a project on counting bees that go in and out of the hive and listening to the noise from within the hive. I agreed to it. It would have happened this year except their lawyers got involved and wanted me to sign a blank cheque. I refused to do that so hopefully they can sort out their contract to read a little better than what it did. Hopefully, probably that will happen the summer after this one.

If we did have a lab available to us, it could possibly bring money in from New Brunswick, P.E.I., perhaps even Quebec, maybe even as far away as Ontario. Some of the things I would like them to be able to look at and detect are things like tracheal mites, American foulbrood, and pesticide residue. How they do the CSI of that, I have no idea; it's well beyond my intelligence level.

MR. CHAIRMAN: Mr. Dunn.

MR. DUNN: Where is the largest and the least concentration of beekeepers and colonies in the province?

MR. GOETZ: I would suspect the largest concentration of beehives would be the Annapolis Valley. The largest concentration of beekeepers might even be right here in Halifax.

MR. BRANDT: The largest concentration of beekeepers, I'm not sure. I would say the least would be Cape Breton Island and the South Shore, Yarmouth way, I don't think there's a great deal going on there.

The Valley is crowded, no doubt, and areas around Truro, there's quite a few beekeepers there as well - Debert - simply because of their proximity to a lot of the blueberries, it's a good spot.

MR. CHAIRMAN: Thank you. My speakers list is exhausted. I'm kind of curious myself, also, it's interesting. If you don't mind, I guess I do get to ask questions every now and then.

I see where there's a shortfall of beehives in this province. You made one comment that was interesting, you do it for the honey or you do it for the money. Obviously there are two different entities that do this. It's encouraging to hear that a lot of people are taking the courses. I guess we don't know the real exact numbers of how many.

You've survived what I think a few years ago was a bad time in the industry, it was hit pretty hard. Looking at the optimistic side of it, I think there's opportunity you're seeing to expand into bees. You haven't talked about the actual product itself - honey. Where is that in the market today?

MR. GOETZ: Right now I believe there is a honey shortage in the world. I guess that's a good thing for us. It's just we can't generate more than what the bees are going to give us, but the price of honey goes up and down and a lot of the large packers will actually buy up honey or keep theirs in stock. Sometimes you'll see these large tractor-trailers that are kind of abandoned - well they're not abandoned, some of them are full of barrels of honey and they wait until the price goes up. It's kind of like oil - you sell it when the price is good.

MR. BRANDT: One of the things that I would encourage you to do is when you go grocery shopping, turn around that jar of honey and have a look at the back of it. It might say Canada No. 1 on the front and it may very well just say a blend of Canadian and Argentinian, or other places as well. I would say that there is room for growth in both areas - pollination and honey.

MR. GOETZ: I do a lot of farmers' markets and people are genuinely interested in buying local and knowing their farmer and where their products are coming from. In that sense it's growing and I hope we can keep the supply there for them.

MR. CHAIRMAN: Is honey a commodity that is sold on the market - like futures for grain and different things? How is the price of honey set? Does each individual person sell? Is there one buyer? If you don't mind, I'm kind of curious on the demand side of the industry for the honey.

MR. GOETZ: I was offered 60 cents a pound for my honey and I turned that down. Typically in a 500-gram jar, I'll sell that for \$6 or \$7, which is a reasonable price - very comparable to the store. There are honeys out there like Manuka honey from Australia that's magic honey and cures everything. Well, sure, okay - if I can get \$15 a pound for honey, I would too. So there is some hype about that. There are honeys out there - I forget where it's from, I think it's some South Pacific island where they did this honey test and this honey won and all of a sudden it's worth \$50 a pound kind of thing. Well, okay. It's amazing in the world that there is more Manuka honey sold than there is produced.

MR. BRANDT: I would say that in Nova Scotia in regard to - are there packers? I don't think a great deal of that goes on here. I would say that probably the majority of beekeepers sell their own honey. There may be a bit if a beekeeper is shy - he might buy a few barrels from another beekeeper, but as far as an actual packer, I don't think we're anywhere near that stage here.

MR. CHAIRMAN: I guess I sparked one more question - Mr. Dunn.

MR. DUNN: I'm going back to an earlier question dealing with the Pollination Enhancement Program. If the investment is not there for that particular program, what impact will that have, not only on your industry, but on the Nova Scotia agricultural industry, in your opinion?

MR. GOETZ: My thought is it's going to slow down expansion of bee yards in order to meet what the blueberry industry wants because it's just a cost. In order to expand, it's going to cost you about \$300 a hive - anywhere from \$250 to \$300 is a good planning figure. A lot of people have to eat as well.

MR. CHAIRMAN: Mr. Irving.

MR. IRVING: A quick follow-up on our chairman's questioning - is there any need at this point in time in terms of branding of a Nova Scotia local product that would be recognizable for locally produced honey? Is that not needed because you're at the farmers' market and your face is local, or is there just not the supply to create more demand by branding something as a local Nova Scotian product?

MR. GOETZ: I know on our table we have the Nova Scotia tartan as our tablecloth and we have our shirts. Yes, what does each individual do, a good question. We're talking province-wide, right?

MR. IRVING: Yes, we have Taste of Nova Scotia, we're trying to brand locally-made products. Is there room to be doing some initiatives around locally-produced honey?

MR. GOETZ: I'm sure there is. Off the top of my head I couldn't think of how we could possibly do that but we're open for suggestions.

MR. IRVING: It might be an area for your association to give some thought to, in terms of leverage for attracting people into your association. If your association is creating a brand that you aren't part of unless you join the association and meet a certain standard, that might help build your association. Just a thought.

MR. GOETZ: Good thought. I know we have our own logo that we have for the association. Great, we'll take that back to them, thank you.

MR. CHAIRMAN: We thank you folks, very much appreciate that. It's always interesting to learn about our agricultural sector out there and certainly you're an important part of it, for a lot of different reasons - not just the product but the blueberry industry and the apple industry. It looks like there's lots of room for expansion so what ideas we can get, we appreciate it.

MR. BRANDT: There is in the bee industry, as well as what I was mentioning about pine. That has long been a sore point for me, bringing stuff from Manitoba just doesn't make sense.

MR. CHAIRMAN: I made a note of that. I have a very innovative pine-producing company in my riding, Lewis Mouldings, that is exclusive in pine. They do finger joints

and various other mouldings there. I'm going to bring it to the owner's attention and who knows? Thank you very much.

MR. BRANDT: I would also like to re-extend my invitation to everybody here. I'm serious, come on out, I'll take you through some beehives. If you're looking for something calm, believe it or not, going through a beehive works. It slows you down and you would enjoy it, I can't express that enough, it's an amazing world to go into.

MR. CHAIRMAN: It would be something good for just before Question Period in the Legislature. Thank you.

We'll take a short recess and then we'll come back in probably five to 10 minutes. Thank you.

[10:08 a.m. The committee recessed.]

[10:18 a.m. The committee reconvened.]

MR. CHAIRMAN: I will call the meeting back to order and go into committee business. We have agenda-setting. Currently we have two topics - one for January will be Natalie Smith, President, and Keltie Butler, Executive Director of the Farmers' Markets of Nova Scotia. The other one we have is geoscience research for Nova Scotia's offshore growth. That would be Deputy Coolican of the Department of Energy. We have two, so I would suggest that we have one each from each caucus. Ms. Miller.

MS. MILLER: I would like to suggest the wine industry - Gillian Mainguy, for the Winery Association of Nova Scotia, and Stewart Creaser of Avondale Sky Winery.

MR. CHAIRMAN: Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is carried.

The PC caucus - Mr. Dunn, they threw you in here as a fill-in for not knowing all these subjects that are there in front of you.

MR. DUNN: You're throwing a curve at me. Perhaps what I'll do is - just give me a couple of minutes to look at these here. I'll pass it on.

MR. CHAIRMAN: Not a problem. Mr. Belliveau.

MR. BELLIVEAU: We submitted a list. I don't know if you are aware of it. We have selected three topics. Are you suggesting for me to give you each of them?

MR. CHAIRMAN: No, if you want to go with the No. 1, the first one you have on there. We're only going to take one each.

MR. BELLIVEAU: Okay. The first one we have is the Medway Community Forest Co-operative as a topic.

MR. CHAIRMAN: Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is carried.

Mr. Dunn.

MR. DUNN: Mr. Chairman, I'll go with No. 1 on the list. That would be the Nova Scotia sheep producers and the Nova Scotia Turkey Producers Marketing Board.

MR. CHAIRMAN: Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is defeated.

Mr. Dunn, do you have a second choice?

MR. DUNN: I certainly do, Mr. Chairman.

MR. CHAIRMAN: I think you have lots of choices.

MR. DUNN: I hope I don't run out of them, Mr. Chairman, then I'll have to make one up. I guess No. 2, the Turkey Farmers of Nova Scotia.

MR. CHAIRMAN: Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is defeated.

MR. DUNN: When I played ball, Mr. Chairman, my batting average was better and I want you to know that, especially when I was down playing ball in Guysborough, the Guysborough member would know that - Old Home Week in Guysborough.

Mr. Chairman, I'm going to follow suit here and I guess No. 3, the members of the Pictou North Colchester Federation of Agriculture.

MR. CHAIRMAN: Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is defeated.

Now that doesn't mean strike three but you can continue.

MR. DUNN: Mr. Chairman, I'm going to try the Department of Natural Resources, the last one there.

MR. CHAIRMAN: Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is defeated.

We're down to two. It's a good thing there was a big list. I'm sure there's one there.

MR. DUNN: Mr. Chairman, I'm going to give you the privilege of picking one of those two, just to see what happens.

MR. CHAIRMAN: Well, as we already had a presentation by the sector for Nova Scotia Forest Products Association, that administers the silviculture fund, we were hopeful. There were a few questions, I believe, unanswered in that presentation. I believe Mr. Belliveau was there for that and unfortunately the members of your group weren't.

I believe that would be a good follow-up to that presentation that we had from the private sector side of it, the group that actually works in that Nova Scotia Silviculture Contractors Association, if that's acceptable. So if you'd like to make that motion, I don't think I can make a motion.

MR. DUNN: Well perhaps on giving it second thought, Mr. Chairman, I'm going to select Group Savoie.

MR. CHAIRMAN: Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is defeated.

MR. DUNN: The Nova Scotia Silviculture Contractors Association, Mr. Chairman.

MR. CHAIRMAN: Would all those in favour of the motion please say Aye. Contrary minded, Nay.

The motion is carried.

We have three selected, so we're good now for the next five meetings, which I think is a good cross-section of presenters.

Our next meeting date is January 15<sup>th</sup>. That will be the Farmers' Markets of Nova Scotia, at 9:00 a.m., here in this location.

If there's no further business, I would ask for a motion to adjourn.

MR. IRVING: Excuse me, Mr. Chairman, are we dealing with this piece of correspondence?

MS. KIM LANGILLE (Legislative Committee Clerk): That was the request to appear that came in. I attached the correspondence there.

MR. CHAIRMAN: Yes, and I didn't see where any of us had put it on our list as a presenter for the next round - maybe the round after.

MR. DUNN: Motion to adjourn.

MR. CHAIRMAN: We stand adjourned. Merry Christmas to everybody.

[The committee adjourned at 10:25 a.m.]